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# (54) METHOD AND SYSTEM IN A PACKET SWITCHING NETWORK FOR DYNAMICALLY ADJUSTING THE BANDWIDTH OF A CONTINUOUS BIT RATE VIRTUAL PATH CONNECTION ACCORDING TO THE NETWORK LOAD

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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395.51, 395.43; 709/234, 223-226

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### (57) ABSTRACT

The present invention relates to a system and method for dynamically adjusting the bandwidth of a continuous bit rate virtual path connection established between a source node and a destination node within a packet or cell switching network comprising a plurality of nodes interconnected with transmission links. In the network, a bandwidth management server having access to information concerning network nodes and transmission links is defined. This server is informed each time a virtual path connection or a virtual channel connection is established on the network with an indication concerning the initial bandwidth reserved for said connection. The server detects and shares, on a continuous or periodical mode, the bandwidth which is available on transmission links among the bandwidth adjustable continuous bit rate virtual path connections and determines for each connection a new bandwidth. The source node is informed each time a new bandwidth is computed. It adjusts the bandwidth of the corresponding bandwidth adjustable continuous bit rate virtual path connection accordingly.

#### 16 Claims, 19 Drawing Sheets

